IUBMB Enzyme Nomenclature

EC 3.1.3.26

Common name: 4-phytase

Reaction: myo-inositol hexakisphosphate + $H_2O = 1D$ -myo-inositol 1,2,3,4,5-pentakisphosphate + phosphate

Other name(s): 6-phytase (name based on 1L-numbering system and not 1D-numbering); phytase; phytate 6-phosphatase

Systematic name: myo-inositol-hexakisphosphate 6-phosphohydrolase

Links to other databases: BRENDA, EXPASY, KEGG, ERGO, PDB, CAS registry number: 9001-89-2

References:

- 1. Johnson, L.F. and Tate, M.E. The structure of myo-inositol pentaphosphates. Ann. N.Y. Acad. Sci. 165 (1969) 526-532. [PMID: 4310376]
- 2. Tomlinson, R.V. and Ballou, C.E. Myoinositol polyphosphate intermediates in the dephosphorylation of phytic acid by phytase. Biochemistry 1 (1962) 166-171.
- 3. Lim, P.E. and Tate, M.E. The phytases. II. Properties of phytase fractions F₁ and F₂ from wheat bran and the myo-inositol phosphates produced by fraction F₂. Biochim. Biophys. Acta 302 (1973) 316-328. [PMID: 4349266]
- 4. Cosgrove, D.J. Inositol phosphates: their chemistry, biochemistry, and physiology., Elsevier, Amsterdam, 1980

[EC 3.1.3.26 created 1972, modified 1976, modified 2002]

Return to EC 3.1.3 home page

Return to EC 3.1 home page

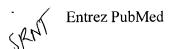
Return to EC 3 home page

Return to Enzymes home page

Return to IUBMB Biochemical Nomenclature home page

Spril

	Туре	Hits	Search Text	DBs
1	BRS	5	6350602.pn. or 5863533.pn. or 5436156.pn.	USPAT; US-PGPUB; EPO; JPO; DERWENT
2	BRS	908	phytase and (aspergillus adj (niger or ficuum))	USPAT; US-PGPUB; EPO; JPO; DERWENT
3	BRS	859	I1 and (nucleic or nucleotide or polynucleo\$ or DNA or RNA or cDNA or genomic)	USPAT; US-PGPUB; EPO; JPO; DERWENT
4	BRS	10	12 and (gorcom.in. or hartingsveldt.in. or paridon.in. or veenstra.in. or luiten.in. or selten.in.)	USPAT; US-PGPUB; EPO; JPO; DERWENT
5	BRS	10	I1 and (gorcom.in. or hartingsveldt.in. or paridon.in. or veenstra.in. or luiten.in. or selten.in.)	USPAT; US-PGPUB; EPO; JPO; DERWENT
6	BRS	838	I2 and cloning	USPAT; US-PGPUB; EPO; JPO; DERWENT
7	BRS	188	I1 and (nucleic or nucleotide or polynucleo\$ or DNA or RNA or cDNA or genomic).ab.	USPAT; US-PGPUB; EPO; JPO; DERWENT









Entrez	PubMed	Nucleotide	Protein	Genome	Structure	MIMO	PMC	Journals	50
Search Put	oMed	for ph	ytase and as	spergillus n	iger		Preview	Go Clear	
•		Limits	Previe	ew/Index	History		Clipboard	Deta	ils

About Entrez

Text Version

Entrez PubMed Overview Help | FAQ Tutorial New/Noteworthy E-Utilities

PubMed Services
Journals Database
MeSH Database
Single Citation Matcher
Batch Citation Matcher
Clinical Queries
LinkOut
Cubby

Related Resources Order Documents NLM Gateway TOXNET Consumer Health Clinical Alerts Clinical Trials.gov PubMed Central Search History will be lost after eight hours of inactivity.

- To combine searches use # before search number, e.g., #2 AND #6.
- Search numbers may not be continuous; all searches are represented.
- Click on query # to add to strategy

Search	Most Recent Queries	Time	Result
<u>#4</u> S	earch phytase and aspergillus niger	09:28:56	<u>93</u>
<u>#2</u> S	earch phytase and aspergillus ficuum	09:25:25	<u>40</u>
<u>#1</u> S	earch phytase and aspergillus	09:24:52	<u>158</u>

Clear History

Write to the Help Desk

NCBI | NLM | NIH

Department of Health & Human Services

Privacy Statement | Freedom of Information Act | Disclaimer

Jun 7 2004 18.11:57